



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/768,558	01/29/2004	Christopher L. Hamlin	03-2099	7613
24319	7590	08/11/2005		EXAMINER
LSI LOGIC CORPORATION 1621 BARBER LANE MS: D-106 MILPITAS, CA 95035			WHITMORE, STACY	
			ART UNIT	PAPER NUMBER
			2825	

DATE MAILED: 08/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/768,558	HAMLIN ET AL.	
	Examiner	Art Unit	
	Stacy A. Whitmore	2825	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 29 January 2004.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-3, 11-16, 24-29 and 37-40 is/are rejected.
- 7) Claim(s) 4-10, 17-23 and 30-36 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 29 January 2004 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>1/04, 5/05</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-3, 11-13, 14-16, 24-26, 27-29, and 37-40 are rejected under 35 U.S.C. 102(b) as being anticipated by Gamal (US Patent 5,754,826).

As for claims 1-3, 11-13, 14-16, 24-26, 27-29, and 37-40, Gamal discloses the invention as claimed, including a method, apparatus, and computer readable medium having instructions for performing a method for mapping platform-based design to multiple foundry processes, comprising:

Defining a virtual process to include at least one fabrication process [figs. 4a-4b, 5a-5b, col. 1 and 3];

Storing, into a database, said virtual process in a representation including a list of attributes of entities making up said at least one fabrication process [col. 4, lines 37-41]; and

Performing optimization of the database using mathematical and statistical tools [col. 3-4 optimization with simulation tools includes mathematical and statistical tools].

Wherein the at least one fabrication process is either a prefabrication step or a late metal step [col. 3-4];

Wherein the list includes at least one of design rules, physical parameters, temperature ranges, thickness, or viscosities [col. 3, lines 58-67].

Finding properties of an optimal process for manufacturing at least one slice [];

Art Unit: 2825

Wherein said optimal process is amenable to accommodating an extension of said at least one slice in a particular direction [col. 3, line 62 – col. 4, line 15];

Running design properties for at least one slice into said database to allow various levels of comparison to take place between a slice space and a process space [col. 3 – col. 4].

Optimizing first and second slices to first and second foundry process including late metal steps, wherein said first and second late metal steps share a functional, geometric, and electrical interface, so that the first and second foundry processes may be implemented in either the first or second foundry process [figs. 4a-4b, 5a-5b, col. 1 and 3-4].

2. Claims 4-10, 17-23, and 30-36 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
3. The following is a statement of reasons for the indication of allowable subject matter: As for claims 4-10, 17-23, and 30-36, the prior art of record fails to disclose either singularly or in combination the invention as claimed, including the method, system, and computer program product for mapping platform-based design to multiple foundry processes, comprising at least the steps of (c1) – (c4) as claimed in claims 4, 17, and 30.
4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stacy A. Whitmore whose telephone number is (571) 272-1685. The examiner can normally be reached on Monday-Thursday, alternate Friday 6:30am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Smith can be reached on (571) 272-1907. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Stacy A Whitmore
Primary Examiner
Art Unit 2825

SAW
August 6, 2005

A handwritten signature in black ink, appearing to read "SAW".